

he Defense Acquisition University (DAU) has been training Department of Defense (DoD) program managers (PMs) for more than 40 years. During that time, the training requirements have changed considerably. Most basic courses are now done online, while intermediate courses feature a combination of online prerequisites followed by classroom training. Advanced PM courses use teams of students to discuss current acquisition issues, analyze and prepare case studies, share lessons from their experience and provide feedback to their colleagues.

Over the years, the duration and content of DoD's PM training has evolved from the initial 5-month program management course to a series of shorter courses taken along a PM's career path. The current PM training framework is shown in Figure 1. To reach Level III certification requires 346 hours of online instruction and 27.5 classroom days. For major acquisition PMs, 70 additional classroom days of specialized training (PMT 401 and PMT 402) are required. The higher levels of certification require significant training along with relevant education and work experience.

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This article concentrates on the executive-level courses (PMT 401 and 402) used to train PMs who will lead the most expensive, critical and highly visible programs in the DoD. These training programs are conceived, developed and taught by DAU faculty with only infrequent use of vendors or outside resources.

Designed to improve DoD acquisition outcomes, the 10-week Program Manager's Course (PMT 401) seeks to:

- Enhance critical thinking and decision-making skills.
- Develop the capability to lead cross-functional integrated product teams in an acquisition environment.
- Embed the habits of reflection, feedback and continuous learning.

The PMT 402 Executive PM Course is an assignmentspecific course for students being assigned to lead major acquisition programs. The crux of this course is for each student to present an analysis of the student's new program and then work with a team of students and faculty to develop an action plan once they are assigned. With this in mind, the remainder of this article concentrates on how DAU implements the three PMT 401 core themes of critical thinking and decision making, leadership skills, and habits of learning.

Critical Thinking Skills

Managing complex defense programs requires both subject-matter expertise and disciplined thinking. As stated by our current Defense Acquisition Executive, Frank Kendall:

The first responsibility of key leaders in the acquisition workforce is to think. One of the many reasons that our key leaders have to be true professionals who are fully prepared to do their jobs by virtue of their education, training and experience is that creative, informed thought is necessary to optimize the structure of a program.

DAU embeds principles of critical thinking in each of our PM courses, and the executive courses use critical thinking elements, standards and intellectual traits from Richard Paul and Linda Elder's "Aspiring Thinker's

Figure 1. DoD Program Management Certification Requirements

Level III Certification Level II Certification Level I Certification **PMT 352A** PMT 352B **ACQ 101** ACQ 201A ACQ 201B Intermediate Systems Program Management Program Management Fundamentals of Systems Intermediate Systems Acquisition, Part A Acquisition, Part B Office Course, Part A Office Course Part B Acquisition Management 22 hrs., online 18.5 days classroom 25 hrs., online 25 hrs., online 4.5 days classroom ENG 101 PMT 251 PMT 257 **BCF 103** SYS 202 Fundamentals of Program Management Program Management Fundamentals of Business Intermediate Systems Systems Engineering Financial Management Planning, Research Tools Course, Part I Tools Course, Part II Development and 20 hrs., online 4.5 days classroom 35 hrs., online 26 hrs., online Engineering 9 hrs., online CON 121 **CON 124** CLB 007 Cost Analysis Contract Planning **Contract Execution** LOG 103 12 hrs., online 12 hrs., online Reliability, Availability CLV 016 and Maintainability Introduction to Earned CON 127 Value Management 32 hrs., online Contract Management 10 hrs., online PMT-401 and PMT-402 meet statutory requirements for 1 Year of Experience PEO/ACAT I/II PM & Deputy PM (Title 10 U.S.C. 1735) **IRM 101 EVM 101 Basic Information** Fundamentals of Earned PMT 401 PMT 402 Systems Management Value Management Program Manager's Executive 34 hrs., online 34 hrs., online Course PM Course 10 weeks classroom 20 days classroom + online modules 2 Years of Experience * Potential ACAT I, IA, II and III PMs, Dptv PMs * PEOs & ACAT I, KA, II PMs & Dpty PMs

4 Years of Experience

Guide to Critical Thinking." As an example, standards of critical thinking include clarity, accuracy, significance, completeness and fairness.

Applying the proven doctrine of "train as you fight," the PMT 401 curriculum uses program management case studies to develop critical thinking and decision-making skills. These case studies are prepared by faculty and students and are based on real defense programs. The 10-week PMT 401 course includes more than 80 case studies that cover a broad spectrum of acquisition life-cycle development and sustainment issues. Each case provides the background on a program and then presents the students with a dilemma (or problem) that the PM needs to address. Students analyze the case and then present and debate alternatives for how the PM should respond.

A very significant part of the case learning process is the four-stage learning model shown in Figure 2. Following this sequential process is quite important if one is to learn as much as possible from each case. The first step of individual preparation occurs when students read the case—normally during the evening prior to the class. Second, small groups of five to seven students meet in the morning before class starts and briefly discuss each case with a faculty facilitator. Third, all students convene in the classroom for a facilitated discussion led by the

faculty sponsor for the case, who often is the case author as well. After class, students have an opportunity to reflect on what they learned and are given a learning journal in which to record their reflections. Faculty small group advisors prompt students to share their reflections as the course proceeds.

Faculty members are encouraged to "not teach" but to facilitate their cases. Case studies normally have no "right" answer, so the emphasis is on the analysis and critical thinking skills demonstrated by the students. The case studies also are used to apply a variety of management tools and frameworks such as stakeholder analysis, interest-based negotiations, polarity thinking, appreciative inquiry and action learning.

Near the end of the course, each student team prepares its own case study based on one of the team member's real-world dilemmas and then facilitates the case with the rest of the class. This is not only a very popular part of the course but has become our leading approach for new case development.

Leadership Skills

If case studies are the heart of the Program Manager's Course, leadership is the soul of the course. Students arrive in class

with a portfolio of technical and management skills, so it is often their leadership skills that most need development. This is illustrated in the career development timeline in Figure 3. Technical and management skills are still required for these PMs, but it is the leadership skills that will most influence their ultimate success.

In "Marching an Army Acquisition Program Toward Success" (*Defense AT&L*, November-December 2012), the authors found that "the first characteristic that separates the really suc-

cessful PMs is their leadership. They set the tone, they should be decisive, and have a vision."

The leadership theme also was stressed by Kendall in the May-June 2013 issue of *Defense AT&L*:

Having seen more than 4 decades of defense acquisition policy changes, I am absolutely convinced that nothing matters as much as professional leadership. Once you have that, the rest is details.

At DAU, an assessment-based approach fosters leadership development: Instead of teaching leadership skills, the course focuses on assessing these skills so our students can work on their own development while they are with us and after they return to the workplace. Various assessment tools and team exercises are employed to highlight students' strengths as well as their leadership development needs.

Figure 3. Career Development for Program Managers

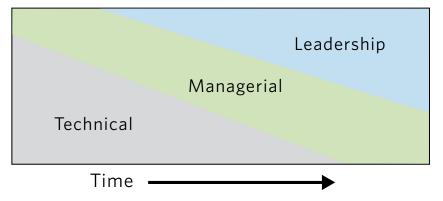
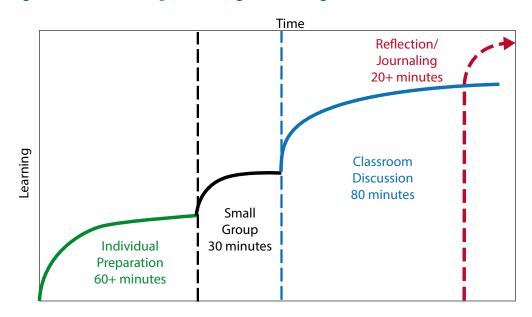


Figure 2. Case Study Four-Stage Learning Process



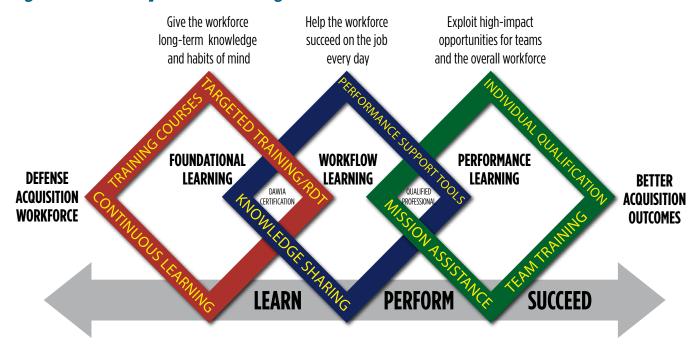
The assessment starts before students arrive by having them complete online personality type, emotional intelligence, and workplace (360-degree) assessments. The reports then are provided to students early in the course along with the opportunity to share and discuss them with both peers and selected faculty. The key is to integrate these assessments into a framework to encourage further skill development.

The assessment continues with observation of students in small- and large-group case discussions. How effectively do students communicate their thoughts, build on others' comments, and help the group reach consensus on how to address each case dilemma? In addition to facilitating, faculty members must observe student performance and provide feedback to students both individually and in scheduled small group sessions.

Team exercises and simulations are used to place students

in a team environment where they get additional feedback. One example of this is "Looking Glass," an organizational simulation that DAU's Defense Systems Management College licenses from the Center for Creative Leadership. Here, class members take the key leadership positions in a commercial glass manufacturing company and are challenged to run the company for an entire day. After the simulation, a second day is dedicated to feedback on how each team and individual performed in the exercise and how the feedback supports their personal leadership development goals. There also is a media workshop in which each student is

Figure 4. DAU Acquisition Learning Model



given a PM role from one of the case studies and required to explain and defend his or her program to members of the press (with the press role performed by faculty members). These media interviews are videotaped and analyzed for learning points by groups of students.

The crux of the leadership development approach is that, before students can lead a program or team, they must be able to both understand and lead themselves.

Reflection, Feedback and Continuous Learning

Effective PM training is more than a series of course modules filled with content. There are key learning processes that literally make or break a training event or program. The first of these is establishing a positive learning climate both inside and outside of the classroom. Nothing can be more counterproductive to learning than for students not to want to be there or to be distracted constantly by outside events. At DAU, various approaches are used to create a collegial atmosphere and keep the focus on learning. These include icebreaker exercises, class lunches and socials, and even cookouts and competitive games in the evenings. The goal is to have students enjoy being together and learning together while developing personal and professional relationships to draw on during the remainder of their careers.

The second key learning process is team learning. Defense programs are managed with cross-functional teams; therefore, the learning approach also features cross-functional teams. Students work all of their case studies in teams

(called small groups), and these teams are remixed halfway through the course so students can work with new peers and faculty members. Experience demonstrates the teamwork approach to be very beneficial during the courses. Students frequently add these peers to their professional network and often consult with them on program issues once they return to the workplace.

The third key learning process is peer feedback. In DAU's senior PM courses, there are no tests, no term papers and no grades. The key process for student evaluation is feedback given to each student by both peers and faculty using a simple process developed by the Center for Creative Leadership called Situation-Behavior-Impact (SBI). As outlined in the Center's publication *Feedback That Works*, the SBI process seeks to overcome conversational feedback, which often is vague or judgmental. Instead of feedback like "great job on that report," one might say, "The program status report you submitted yesterday [Situation] contained all the requested data and your analysis was so thorough [Behavior] that the boss has cited it as an example for others to follow [Impact]."

To implement the feedback, students share their personal learning goals with their small group and have fellow students hold each other accoutable for working on their goals. After the SBI process is explained early in the course, peer feedback sessions are scheduled every few weeks to provide students feedback on their development goals while allowing them to practice providing feedback to others. This increases the likelihood they will use the SBI feedback process with their real project teams when they return to work.

For PM training to have the greatest impact, its benefits must continue after students return to the workplace. Over the years, DAU has expanded its focus from being just a training provider to becoming a broad-based performance support organization. This is reflected in DAU's Acquisition Learning Model illustrated in Figure 4.

Today, attending a training program is just the starting point in developing an ongoing relationship with DAU. After returning to the workplace, graduates have a network of faculty members they can call on to assist them with emerging program issues. DAU also has a large set of online references, tools and learning modules that are available to its graduates. For larger problems, a faculty team can be assembled to provide onsite team training or mission assistance.

Executive coaching also is in DAU's repertoire of support tools. With more than 50 faculty members formally trained as executive coaches, DAU recently won a national award for the outcomes achieved by its enterprise-wide executive coaching program.

What this means for PMs is that, once they complete an executive course, they can request an executive coach to help them with their newly assigned program. The coach provides the ideal "sounding board" to help the new PM think through a variety of program issues, including developing a program plan, reorganizing or dealing with difficult program stakeholders.

Comments from PMs who have used DAU executive coaches include, "A catalyst for change. My coach challenged me to think creatively and systematically. I couldn't lead the way I was used to leading. My coach helped my me adapt and try on new behaviors," and "A strategic thinking partner. Helped me go to the strategic perspective. At my level, I really appreciated having someone who knew the ropes and path, but didn't tell me what to do." Customer demand for the coaching program continues to grow.

Summary

With the return of troops from overseas deployments, the defense budget is shrinking and likely will be lower in future years. Nevertheless, defense programs continue to demand highly talented PMs who can deliver needed products and services to our military customers. The DAU's challenge is to make its training and program support tools even more effective in this resource-constrained environment. Anchor points for the training approach are enhancing the PMs' critical thinking and decision-making skills, developing their portfolios of leadership skills, and embedding the habits of reflection, feedback and continuous learning. In evolving to meet the demand for effective training, DAU must continue to adapt and change so it can develop top performing PMs who will meet our warfighters' even more stingent demands to keep our nation safe and secure. ҈

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